

Economic Growth Case Comparisons

Table B1. Total Energy Supply and Disposition Summary
(Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	2005	Projections								
		2010		2020		2030				
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
Production										
Crude Oil and Lease Condensate	10.96	11.98	11.99	12.01	12.25	12.48	12.65	11.25	11.40	11.53
Natural Gas Plant Liquids	2.33	2.39	2.43	2.46	2.30	2.38	2.42	2.22	2.31	2.39
Dry Natural Gas	18.77	19.61	19.93	20.19	20.81	21.41	21.80	20.36	21.15	21.88
Coal ¹	23.20	24.36	24.47	24.58	25.19	26.61	28.22	29.64	33.52	36.90
Nuclear Power	8.13	8.23	8.23	8.23	8.91	9.23	9.28	8.80	9.33	10.53
Hydropower	2.71	3.02	3.02	3.02	3.09	3.08	3.08	3.09	3.09	3.10
Biomass ²	2.71	4.15	4.22	4.32	4.47	4.69	5.04	4.66	5.26	6.06
Other Renewable Energy ³	0.76	1.20	1.18	1.18	1.28	1.33	1.32	1.38	1.44	1.51
Other ⁴	0.22	0.66	0.67	0.73	0.90	0.89	1.09	0.99	1.12	1.21
Total	69.80	75.60	76.13	76.71	79.20	82.09	84.91	82.37	88.63	95.10
Imports										
Crude Oil ⁵	22.09	21.39	21.88	22.55	23.16	24.72	26.54	25.19	28.63	33.17
Liquid Fuels and Other Petroleum ⁶	7.16	5.64	6.02	6.27	6.30	7.05	7.80	7.27	9.02	10.13
Natural Gas	4.42	5.12	5.36	5.59	5.63	6.17	6.80	5.41	6.47	8.03
Other Imports ⁷	0.85	0.92	0.92	0.94	1.66	1.73	1.81	2.03	2.26	2.16
Total	34.52	33.07	34.18	35.34	36.75	39.66	42.96	39.89	46.37	53.49
Exports										
Petroleum ⁸	2.31	2.69	2.71	2.75	2.78	2.84	2.92	2.80	2.90	3.03
Natural Gas	0.75	0.70	0.69	0.68	0.72	0.69	0.66	0.95	0.87	0.78
Coal	1.27	1.12	1.12	1.12	0.88	0.80	0.74	0.66	0.69	0.67
Total	4.33	4.50	4.52	4.55	4.38	4.33	4.31	4.41	4.47	4.49
Discrepancy⁹	-0.20	-0.66	-0.70	-0.71	-0.60	-0.74	-0.60	-0.64	-0.63	-0.30
Consumption										
Liquid Fuels and Other Petroleum ¹⁰	40.61	40.80	41.76	42.78	43.72	46.52	49.44	46.52	52.17	57.99
Natural Gas	22.63	24.17	24.73	25.23	25.86	27.04	28.10	24.94	26.89	29.28
Coal	22.87	24.13	24.24	24.35	25.80	27.29	28.97	30.16	34.14	37.29
Nuclear Power	8.13	8.23	8.23	8.23	8.91	9.23	9.28	8.80	9.33	10.53
Hydropower	2.71	3.02	3.02	3.02	3.09	3.08	3.08	3.09	3.09	3.10
Biomass ¹¹	2.38	3.24	3.30	3.38	3.47	3.64	3.91	3.56	4.06	4.66
Other Renewable Energy ³	0.76	1.20	1.18	1.18	1.28	1.33	1.32	1.38	1.44	1.51
Other ¹²	0.08	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.05
Total	100.19	104.83	106.50	108.21	112.16	118.16	124.14	118.50	131.16	144.40

Economic Growth Case Comparisons

Table B1. Total Energy Supply and Disposition Summary (Continued)
 (Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	2005	Projections									
		2010				2020				2030	
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	
Prices (2005 dollars per unit)											
Petroleum (dollars per barrel)											
Imported Low Sulfur Light Crude Oil Price ¹³	56.76	57.47	57.47	57.13	52.51	52.04	52.04	59.12	59.12	59.12	
Imported Crude Oil Price ¹³	49.19	51.20	51.20	51.20	46.47	46.47	46.47	51.63	51.63	51.63	
Natural Gas (dollars per million Btu)											
Price at Henry Hub	8.60	6.05	6.28	6.50	5.41	5.71	5.73	6.16	6.52	6.87	
Wellhead Price ¹⁴	7.29	5.38	5.59	5.79	4.80	5.07	5.09	5.48	5.80	6.13	
Natural Gas (dollars per thousand cubic feet)											
Wellhead Price ¹⁴	7.51	5.54	5.76	5.96	4.95	5.22	5.24	5.64	5.98	6.31	
Coal (dollars per ton)											
Minemouth Price ¹⁵	23.34	23.98	24.20	24.38	20.95	21.58	22.17	20.99	22.60	23.64	
Coal (dollars per million Btu)											
Minemouth Price ¹⁵	1.15	1.17	1.18	1.19	1.05	1.08	1.11	1.07	1.15	1.20	
Average Delivered Price ¹⁶	1.61	1.76	1.77	1.78	1.59	1.62	1.66	1.62	1.71	1.77	
Average Electricity Price (cents per kilowatthour)	8.1	7.9	8.1	8.2	7.6	7.9	8.1	7.8	8.1	8.4	

¹Includes waste coal.

²Includes grid-connected electricity from wood and waste; biomass, such as corn, used for liquid fuels production; and non-electric energy demand from wood. Refer to Table A17 for details.

³Includes grid-connected electricity from landfill gas; municipal solid waste; wind; photovoltaic and solar thermal sources; and non-electric energy from renewable sources, such as active and passive solar systems. Excludes electricity imports using renewable sources and nonmarketed renewable energy. See Table A17 for selected nonmarketed residential and commercial renewable energy.

⁴Includes liquid hydrogen, methanol, and some domestic inputs to refineries.

⁵Includes imports of crude oil for the Strategic Petroleum Reserve.

⁶Includes imports of finished petroleum products, unfinished oils, alcohols, ethers, blending components, and renewable fuels such as ethanol.

⁷Includes coal, coal coke (net), and electricity (net).

⁸Includes crude oil and petroleum products.

⁹Balancing item. Includes unaccounted for supply, losses, gains, and net storage withdrawals.

¹⁰Includes petroleum-derived fuels and non-petroleum derived fuels, such as ethanol and biodiesel. Petroleum coke, which is a solid, is included. Also included are natural gas plant liquids, crude oil consumed as a fuel, and liquid hydrogen. Refer to Table A17 for detailed renewable liquid fuels consumption.

¹¹Includes grid-connected electricity from wood and wood waste, non-electric energy from wood, and biofuels heat and coproducts used in the production of liquid fuels, but excludes the energy content of the liquid fuels.

¹²Includes net electricity imports.

¹³Weighted average price delivered to U.S. refiners.

¹⁴Represents lower 48 onshore and offshore supplies.

¹⁵Includes reported prices for both open market and captive mines.

¹⁶Prices weighted by consumption; weighted average excludes residential and commercial prices, and export free-alongside-ship (f.a.s.) prices.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 are model results and may differ slightly from official EIA data reports.

Sources: 2005 natural gas supply values and natural gas wellhead price: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2006/04) (Washington, DC, April 2006). 2005 coal minemouth and delivered coal prices: EIA, *Annual Coal Report 2005*, DOE/EIA-0584(2005) (Washington, DC, October 2006). 2005 petroleum supply values: EIA, *Petroleum Supply Annual 2005*, DOE/EIA-0340(2005)/1 (Washington, DC, October 2006). 2005 low sulfur light crude oil price: EIA, Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." Other 2005 coal values: *Quarterly Coal Report, October-December 2005*, DOE/EIA-0121(2005/4Q) (Washington, DC, March 2006). Other 2005 values: EIA, *Annual Energy Review 2005*, DOE/EIA-0384(2005) (Washington, DC, July 2006). **Projections:** EIA, AEO2007 National Energy Modeling System runs LM2007.D112106A, and HM2007.D112106A.

Economic Growth Case Comparisons

Table B2. Energy Consumption by Sector and Source
 (Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	2005	Projections								
		2010		2020		2030				
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
Energy Consumption										
Residential										
Liquefied Petroleum Gases	0.51	0.53	0.53	0.54	0.56	0.58	0.60	0.58	0.62	0.66
Kerosene	0.10	0.10	0.10	0.10	0.09	0.10	0.10	0.09	0.09	0.09
Distillate Fuel Oil	0.93	0.90	0.90	0.90	0.85	0.85	0.85	0.75	0.76	0.76
Liquid Fuels and Other Petroleum Subtotal	1.54	1.52	1.53	1.53	1.50	1.53	1.55	1.41	1.46	1.51
Natural Gas	4.98	5.16	5.18	5.20	5.30	5.43	5.58	5.19	5.47	5.74
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Renewable Energy ¹	0.41	0.42	0.43	0.43	0.40	0.40	0.41	0.38	0.39	0.41
Electricity	4.66	5.02	5.06	5.10	5.62	5.80	6.00	6.05	6.47	6.88
Delivered Energy	11.60	12.14	12.21	12.27	12.82	13.17	13.55	13.04	13.80	14.55
Electricity Related Losses	10.15	10.87	10.90	10.93	11.79	12.08	12.32	12.32	12.89	13.52
Total	21.75	23.01	23.11	23.20	24.61	25.26	25.87	25.36	26.70	28.07
Commercial										
Liquefied Petroleum Gases	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10
Motor Gasoline ²	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
Kerosene	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Distillate Fuel Oil	0.48	0.45	0.45	0.45	0.47	0.48	0.49	0.47	0.49	0.51
Residual Fuel Oil	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Liquid Fuels and Other Petroleum Subtotal	0.77	0.75	0.75	0.75	0.78	0.80	0.81	0.78	0.81	0.85
Natural Gas	3.15	3.31	3.31	3.31	3.73	3.86	4.02	4.01	4.36	4.71
Coal	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Renewable Energy ³	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Electricity	4.32	4.76	4.77	4.78	5.59	5.78	5.98	6.47	7.03	7.58
Delivered Energy	8.46	9.04	9.05	9.07	10.32	10.66	11.03	11.48	12.43	13.36
Electricity Related Losses	9.42	10.30	10.27	10.26	11.74	12.03	12.30	13.18	14.01	14.90
Total	17.88	19.34	19.33	19.32	22.06	22.69	23.32	24.66	26.44	28.26
Industrial⁴										
Liquefied Petroleum Gases	2.13	2.15	2.26	2.37	1.97	2.26	2.56	1.88	2.40	3.00
Motor Gasoline ²	0.32	0.30	0.32	0.34	0.30	0.33	0.37	0.31	0.36	0.41
Distillate Fuel Oil	1.23	1.11	1.18	1.24	1.11	1.22	1.33	1.09	1.26	1.44
Residual Fuel Oil	0.23	0.17	0.18	0.18	0.17	0.17	0.18	0.17	0.18	0.20
Petrochemical Feedstocks	1.38	1.40	1.48	1.57	1.30	1.50	1.72	1.19	1.57	1.99
Other Petroleum ⁵	4.45	3.89	4.05	4.26	4.00	4.34	4.75	4.17	4.78	5.30
Liquid Fuels and Other Petroleum Subtotal	9.73	9.02	9.47	9.95	8.84	9.82	10.91	8.81	10.55	12.33
Natural Gas	6.84	7.65	7.86	8.01	7.58	8.26	8.76	7.58	8.90	10.42
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease and Plant Fuel ⁶	1.10	1.08	1.10	1.11	1.17	1.21	1.22	1.11	1.15	1.18
Natural Gas Subtotal	7.94	8.74	8.95	9.12	8.75	9.46	9.98	8.69	10.05	11.60
Metallurgical Coal	0.62	0.59	0.60	0.62	0.51	0.57	0.62	0.44	0.57	0.69
Other Industrial Coal	1.35	1.35	1.37	1.39	1.29	1.34	1.39	1.27	1.36	1.45
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.13	0.21	0.28	0.82	0.93	1.07
Net Coal Coke Imports	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.00	0.02	0.03
Coal Subtotal	2.01	1.96	2.00	2.04	1.95	2.14	2.32	2.54	2.89	3.25
Biofuels Heat and Coproducts	0.24	0.68	0.69	0.71	0.74	0.78	0.83	0.80	0.88	0.98
Renewable Energy ⁷	1.44	1.54	1.60	1.65	1.67	1.81	1.97	1.74	2.05	2.38
Electricity	3.48	3.51	3.63	3.75	3.53	3.83	4.16	3.42	4.09	4.79
Delivered Energy	24.85	25.46	26.33	27.21	25.48	27.84	30.17	25.99	30.51	35.34
Electricity Related Losses	7.60	7.60	7.81	8.03	7.40	7.98	8.55	6.97	8.15	9.41
Total	32.45	33.06	34.14	35.24	32.88	35.82	38.72	32.96	38.66	44.74

Economic Growth Case Comparisons

Table B2. Energy Consumption by Sector and Source (Continued)
 (Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	2005	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
Transportation										
Liquefied Petroleum Gases	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09
E85 ⁸	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.04
Motor Gasoline ²	17.00	17.17	17.37	17.60	19.03	19.95	20.86	21.02	22.89	24.72
Jet Fuel ⁹	3.37	3.98	4.04	4.09	4.41	4.54	4.70	4.32	4.70	5.20
Distillate Fuel Oil ¹⁰	6.02	6.42	6.64	6.88	7.14	7.81	8.53	8.07	9.58	11.11
Residual Fuel Oil	0.81	0.82	0.82	0.83	0.84	0.85	0.85	0.85	0.87	0.88
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum ¹¹	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20
Liquid Fuels and Other Petroleum Subtotal	27.42	28.62	29.11	29.63	31.66	33.41	35.21	34.55	38.34	42.24
Pipeline Fuel Natural Gas	0.58	0.65	0.66	0.67	0.77	0.79	0.81	0.75	0.79	0.83
Compressed Natural Gas	0.03	0.06	0.06	0.06	0.09	0.09	0.10	0.10	0.12	0.14
Electricity	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Delivered Energy	28.05	29.35	29.86	30.39	32.55	34.33	36.16	35.44	39.29	43.25
Electricity Related Losses	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08
Total	28.11	29.42	29.92	30.45	32.62	34.40	36.23	35.52	39.37	43.33
Delivered Energy Consumption for All Sectors										
Liquefied Petroleum Gases	2.77	2.82	2.93	3.05	2.68	2.99	3.32	2.62	3.19	3.84
E85 ⁸	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.04
Motor Gasoline ²	17.37	17.51	17.74	17.98	19.38	20.34	21.28	21.38	23.30	25.18
Jet Fuel ⁹	3.37	3.98	4.04	4.09	4.41	4.54	4.70	4.32	4.70	5.20
Kerosene	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Distillate Fuel Oil	8.65	8.88	9.17	9.46	9.56	10.36	11.20	10.38	12.09	13.82
Residual Fuel Oil	1.17	1.13	1.13	1.14	1.14	1.16	1.18	1.16	1.19	1.22
Petrochemical Feedstocks	1.38	1.40	1.48	1.57	1.30	1.50	1.72	1.19	1.57	1.99
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum ¹²	4.61	4.05	4.22	4.43	4.17	4.51	4.92	4.34	4.96	5.48
Liquid Fuels and Other Petroleum Subtotal	39.46	39.92	40.86	41.86	42.78	45.55	48.47	45.55	51.17	56.93
Natural Gas	15.01	16.19	16.41	16.59	16.69	17.65	18.46	16.89	18.86	21.02
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease and Plant Fuel ⁶	1.10	1.08	1.10	1.11	1.17	1.21	1.22	1.11	1.15	1.18
Pipeline Natural Gas	0.58	0.65	0.66	0.67	0.77	0.79	0.81	0.75	0.79	0.83
Natural Gas Subtotal	16.68	17.92	18.17	18.37	18.63	19.64	20.49	18.75	20.80	23.03
Metallurgical Coal	0.62	0.59	0.60	0.62	0.51	0.57	0.62	0.44	0.57	0.69
Other Coal	1.46	1.46	1.48	1.50	1.40	1.45	1.50	1.37	1.47	1.56
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.13	0.21	0.28	0.82	0.93	1.07
Net Coal Coke Imports	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.00	0.02	0.03
Coal Subtotal	2.12	2.07	2.11	2.14	2.06	2.24	2.43	2.64	2.99	3.36
Biofuels Heat and Coproducts	0.24	0.68	0.69	0.71	0.74	0.78	0.83	0.80	0.88	0.98
Renewable Energy ¹³	1.97	2.09	2.14	2.20	2.19	2.34	2.50	2.23	2.56	2.91
Electricity	12.49	13.33	13.49	13.66	14.76	15.45	16.18	15.98	17.63	19.29
Delivered Energy	72.97	76.00	77.46	78.93	81.17	86.00	90.90	85.96	96.03	106.50
Electricity Related Losses	27.23	28.83	29.04	29.28	31.00	32.17	33.24	32.54	35.13	37.90
Total	100.19	104.83	106.50	108.21	112.16	118.16	124.14	118.50	131.16	144.40
Electric Power¹⁴										
Distillate Fuel Oil	0.19	0.23	0.24	0.23	0.24	0.25	0.27	0.26	0.28	0.31
Residual Fuel Oil	0.96	0.66	0.67	0.68	0.70	0.72	0.71	0.71	0.72	0.74
Liquid Fuels and Other Petroleum Subtotal	1.16	0.89	0.90	0.91	0.94	0.97	0.97	0.97	1.01	1.06
Natural Gas	5.95	6.25	6.56	6.86	7.23	7.40	7.60	6.19	6.09	6.25
Steam Coal	20.75	22.06	22.13	22.21	23.74	25.05	26.54	27.52	31.14	33.93
Nuclear Power	8.13	8.23	8.23	8.23	8.91	9.23	9.28	8.80	9.33	10.53
Renewable Energy ¹⁵	3.64	4.69	4.67	4.67	4.91	4.93	4.99	4.99	5.15	5.37
Electricity Imports	0.08	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.05
Total	39.71	42.15	42.53	42.93	45.76	47.62	49.42	48.52	52.77	57.19

Economic Growth Case Comparisons

Table B2. Energy Consumption by Sector and Source (Continued)
 (Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	2005	Projections								
		2010		2020		2030				
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
Total Energy Consumption										
Liquefied Petroleum Gases	2.77	2.82	2.93	3.05	2.68	2.99	3.32	2.62	3.19	3.84
E85 ⁸	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.04
Motor Gasoline ²	17.37	17.51	17.74	17.98	19.38	20.34	21.28	21.38	23.30	25.18
Jet Fuel ⁹	3.37	3.98	4.04	4.09	4.41	4.54	4.70	4.32	4.70	5.20
Kerosene	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Distillate Fuel Oil	8.84	9.11	9.40	9.70	9.79	10.61	11.47	10.64	12.37	14.13
Residual Fuel Oil	2.14	1.78	1.80	1.82	1.85	1.88	1.88	1.87	1.91	1.97
Petrochemical Feedstocks	1.38	1.40	1.48	1.57	1.30	1.50	1.72	1.19	1.57	1.99
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum ¹²	4.61	4.05	4.22	4.43	4.17	4.51	4.92	4.34	4.96	5.48
Liquid Fuels and Other Petroleum Subtotal	40.61	40.80	41.76	42.78	43.72	46.52	49.44	46.52	52.17	57.99
Natural Gas	20.96	22.44	22.97	23.45	23.92	25.05	26.06	23.08	24.95	27.27
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease and Plant Fuel ⁶	1.10	1.08	1.10	1.11	1.17	1.21	1.22	1.11	1.15	1.18
Pipeline Natural Gas	0.58	0.65	0.66	0.67	0.77	0.79	0.81	0.75	0.79	0.83
Natural Gas Subtotal	22.63	24.17	24.73	25.23	25.86	27.04	28.10	24.94	26.89	29.28
Metallurgical Coal	0.62	0.59	0.60	0.62	0.51	0.57	0.62	0.44	0.57	0.69
Other Coal	22.21	23.52	23.61	23.71	25.14	26.50	28.05	28.89	32.61	35.49
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.13	0.21	0.28	0.82	0.93	1.07
Net Coal Coke Imports	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.00	0.02	0.03
Coal Subtotal	22.87	24.13	24.24	24.35	25.80	27.29	28.97	30.16	34.14	37.29
Nuclear Power	8.13	8.23	8.23	8.23	8.91	9.23	9.28	8.80	9.33	10.53
Biofuels Heat and Coproducts	0.24	0.68	0.69	0.71	0.74	0.78	0.83	0.80	0.88	0.98
Renewable Energy ¹⁶	5.61	6.78	6.81	6.87	7.10	7.27	7.49	7.22	7.71	8.28
Electricity Imports	0.08	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.05
Total	100.19	104.83	106.50	108.21	112.16	118.16	124.14	118.50	131.16	144.40
Energy Use and Related Statistics										
Delivered Energy Use	72.97	76.00	77.46	78.93	81.17	86.00	90.90	85.96	96.03	106.50
Total Energy Use	100.19	104.83	106.50	108.21	112.16	118.16	124.14	118.50	131.16	144.40
Ethanol Consumed in Motor Gasoline and E85	0.33	0.90	0.91	0.94	1.00	1.06	1.13	1.12	1.22	1.37
Population (millions)	296.94	308.47	310.26	312.77	323.58	337.13	351.39	334.24	364.94	395.64
Gross Domestic Product (billion 2000 dollars)	11049	12359	12790	13219	15686	17077	18490	19249	22494	25757
Carbon Dioxide Emissions (million metric tons)	5945.3	6124.7	6214.0	6304.2	6582.8	6944.5	7322.2	7141.4	7950.2	8711.2

¹Includes wood used for residential heating. See Table A4 and/or Table A17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

²Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

³Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Table A5 and/or Table A17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

⁴Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

⁵Includes petroleum coke, asphalt, road oil, lubricants, still gas, tire-derived fuel, and miscellaneous petroleum products.

⁶Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

⁷Includes consumption of energy produced from hydroelectric, wood and wood waste, municipal solid waste, and other biomass sources.

⁸E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁹Includes only kerosene type.

¹⁰Diesel fuel for on- and off- road use.

¹¹Includes aviation gasoline and lubricants.

¹²Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, tire-derived fuel, and miscellaneous petroleum products.

¹³Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

¹⁴Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

¹⁵Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

¹⁶Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 are model results and may differ slightly from official EIA data reports.

Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2005 consumption based on: Energy Information Administration (EIA), *Annual Energy Review 2005*, DOE/EIA-0384(2005) (Washington, DC, July 2006). 2005 population and gross domestic product: Global Insight macroeconomic model CTL0806. 2005 carbon dioxide emissions: EIA, *Emissions of Greenhouse Gases in the United States 2005*, DOE/EIA-0573(2005) (Washington, DC, November 2006). **Projections:** EIA, AEO2007 National Energy Modeling System runs LM2007.D112106A, AEO2007.D112106A, and HM2007.D112106A.

Economic Growth Case Comparisons

Table B3. Energy Prices by Sector and Source
(2005 Dollars per Million Btu, Unless Otherwise Noted)

Sector and Source	2005	Projections									
		2010		2020		2030					
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	
Residential											
Liquefied Petroleum Gases	19.29	23.46	23.67	23.88	22.88	23.18	23.24	23.54	23.91	24.26	
Distillate Fuel Oil	14.73	14.82	14.87	14.98	12.95	13.15	13.54	13.59	14.13	14.60	
Natural Gas	12.43	10.77	10.98	11.18	10.23	10.54	10.62	11.00	11.43	11.83	
Electricity	27.59	26.50	26.91	27.31	25.50	26.37	27.03	25.70	26.76	28.05	
Commercial											
Distillate Fuel Oil	12.68	12.65	12.72	12.82	11.01	11.35	11.68	11.87	12.45	13.01	
Residual Fuel Oil	8.41	7.53	7.54	7.55	7.07	7.07	7.09	7.32	7.31	7.35	
Natural Gas	11.20	9.13	9.34	9.53	8.40	8.67	8.70	8.98	9.30	9.62	
Electricity	25.25	24.03	24.50	24.96	23.00	23.95	24.61	23.24	24.27	25.59	
Industrial¹											
Liquefied Petroleum Gases	16.96	16.22	16.42	16.63	15.66	15.91	15.90	16.36	16.55	16.80	
Distillate Fuel Oil	13.08	12.87	12.95	13.04	11.64	12.04	12.37	12.64	13.25	13.88	
Residual Fuel Oil	7.77	9.44	9.50	9.60	8.90	8.91	9.05	9.61	9.58	10.28	
Natural Gas ²	8.16	6.22	6.43	6.62	5.64	5.90	5.95	6.24	6.56	6.86	
Metallurgical Coal	3.06	3.08	3.09	3.11	2.72	2.71	2.71	2.69	2.75	2.83	
Other Industrial Coal	2.15	2.25	2.26	2.27	2.14	2.18	2.23	2.19	2.29	2.36	
Coal to Liquids	0.00	0.00	0.00	0.00	0.90	0.97	1.02	1.20	1.33	1.40	
Electricity	16.69	17.59	18.01	18.40	16.28	17.07	17.57	16.55	17.43	18.53	
Transportation											
Liquefied Petroleum Gases ³	23.92	24.13	24.34	24.55	23.37	23.66	23.72	23.90	24.29	24.65	
E85 ⁴	23.10	21.03	21.29	21.35	20.38	20.61	20.74	21.26	21.50	21.56	
Motor Gasoline ⁵	18.64	17.79	17.90	18.01	16.30	16.63	16.99	17.16	17.76	18.20	
Jet Fuel ⁶	13.14	10.82	10.91	11.01	10.15	10.51	10.93	11.14	11.75	12.80	
Distillate Fuel Oil ⁷	17.52	16.72	16.81	16.90	14.87	15.42	15.88	15.70	16.47	17.38	
Residual Fuel Oil	5.51	7.91	8.05	8.14	7.37	7.36	7.42	8.26	8.27	9.36	
Natural Gas ⁸	14.76	13.75	13.97	14.18	12.59	12.98	13.22	12.93	13.45	13.98	
Electricity	25.22	24.38	24.86	25.35	23.50	24.22	24.64	23.80	24.46	25.53	
Electric Power⁹											
Distillate Fuel Oil	11.38	11.63	11.71	11.83	9.68	9.84	10.17	10.33	10.79	11.39	
Residual Fuel Oil	6.96	6.54	6.58	6.63	6.04	6.08	6.20	6.74	6.85	7.43	
Natural Gas	8.18	5.98	6.22	6.45	5.47	5.76	5.79	6.02	6.33	6.63	
Steam Coal	1.53	1.70	1.71	1.72	1.55	1.58	1.62	1.60	1.69	1.74	
Average Price to All Users¹⁰											
Liquefied Petroleum Gases	17.48	17.87	18.02	18.17	17.49	17.62	17.52	18.30	18.30	18.38	
E85 ⁴	23.10	21.03	21.29	21.35	20.38	20.61	20.74	21.26	21.50	21.56	
Motor Gasoline ⁵	18.60	17.79	17.90	18.01	16.30	16.63	16.99	17.16	17.75	18.20	
Jet Fuel	13.14	10.82	10.91	11.01	10.15	10.51	10.93	11.14	11.75	12.80	
Distillate Fuel Oil	16.22	15.62	15.70	15.81	14.03	14.53	14.98	14.95	15.70	16.54	
Residual Fuel Oil	6.59	7.53	7.61	7.68	6.98	7.00	7.09	7.73	7.79	8.57	
Natural Gas	9.65	7.65	7.83	8.01	7.06	7.32	7.36	7.76	8.09	8.37	
Metallurgical Coal	3.06	3.08	3.09	3.11	2.72	2.71	2.71	2.69	2.75	2.83	
Other Coal	1.57	1.73	1.74	1.75	1.58	1.61	1.65	1.63	1.72	1.77	
Coal to Liquids	0.00	0.00	0.00	0.00	0.90	0.97	1.02	1.20	1.33	1.40	
Electricity	23.73	23.27	23.66	24.04	22.35	23.15	23.70	22.74	23.60	24.71	

Economic Growth Case Comparisons

Table B3. Energy Prices by Sector and Source (Continued)
 (2005 Dollars per Million Btu, Unless Otherwise Noted)

Sector and Source	2005	Projections									
		2010				2020				2030	
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	
Non-Renewable Energy Expenditures by Sector (billion 2005 dollars)											
Residential	215.13	215.77	220.44	225.03	222.24	236.03	247.96	237.41	262.21	289.21	
Commercial	154.38	154.68	157.97	161.22	169.35	181.74	192.39	196.37	222.08	250.92	
Industrial	196.07	188.55	200.48	212.61	169.48	194.88	220.13	174.11	222.08	276.29	
Transportation	474.66	465.42	476.38	488.17	471.76	511.07	552.61	548.13	632.79	724.25	
Total Non-Renewable Expenditures	1040.25	1024.42	1055.27	1087.03	1032.83	1123.73	1213.09	1156.01	1339.16	1540.67	
Transportation Renewable Expenditures ...	0.03	0.06	0.06	0.07	0.13	0.15	0.19	0.39	0.51	0.79	
Total Expenditures	1040.29	1024.49	1055.33	1087.10	1032.96	1123.89	1213.28	1156.40	1339.68	1541.47	

¹Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

²Excludes use for lease and plant fuel.

³Includes Federal and State taxes while excluding county and local taxes.

⁴E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁵Sales weighted-average price for all grades. Includes Federal, State and local taxes.

⁶Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.

⁷Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.

⁸Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

⁹Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

¹⁰Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

N/A = Not applicable.

Note: Data for 2005 are model results and may differ slightly from official EIA data reports.

Sources: 2005 prices for motor gasoline, distillate fuel oil, and jet fuel are based on prices in the Energy Information Administration (EIA), *Petroleum Marketing Annual 2005*, DOE/EIA-0487(2005) (Washington, DC, August 2006). 2005 residential and commercial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2006/04) (Washington, DC, April 2006). 2005 industrial natural gas delivered prices are estimated based on: EIA, *Manufacturing Energy Consumption Survey 1994 and Industrial and Wellhead Prices from the Natural Gas Annual 2004*, DOE/EIA-0131(2004) (Washington, DC, December 2005) and the *Natural Gas Monthly*, DOE/EIA-0130(2006/04) (Washington, DC, April 2006). 2005 transportation sector natural gas delivered prices are model results. 2005 electric power sector natural gas prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, May 2003 through April 2004, Table 4.11.A. 2005 coal prices based on: EIA, *Quarterly Coal Report, October-December 2005*, DOE/EIA-0121(2005/4Q) (Washington, DC, March 2006) and EIA, AEO2007 National Energy Modeling System run AEO2007.D112106A. 2005 electricity prices: EIA, *Annual Energy Review 2005*, DOE/EIA-0384(2005) (Washington, DC, July 2006). 2005 ethanol prices derived from weekly spot prices in the Oxy Fuel News. **Projections:** EIA, AEO2007 National Energy Modeling System runs LM2007.D112106A, AEO2007.D112106A, and HM2007.D112106A.

Economic Growth Case Comparisons

Table B4. Macroeconomic Indicators

(Billion 2000 Chain-Weighted Dollars, Unless Otherwise Noted)

Indicators	2005	Projections									
		2010			2020			2030			
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	
Real Gross Domestic Product	11049	12359	12790	13219	15686	17077	18490	19249	22494	25757	
Components of Real Gross Domestic Product											
Real Consumption	7841	8867	9111	9353	11140	12006	12888	13629	15590	17564	
Real Investment	1866	1936	2139	2342	2657	3030	3407	3760	4735	5711	
Real Government Spending	1958	2074	2117	2160	2236	2396	2555	2358	2709	3060	
Real Exports	1196	1741	1767	1792	3191	3584	3984	5530	6581	7654	
Real Imports	1815	2254	2321	2386	3584	3761	3898	6231	6649	7022	
Energy Intensity											
(thousand Btu per 2000 dollar of GDP)											
Delivered Energy	6.60	6.15	6.06	5.97	5.17	5.04	4.92	4.47	4.27	4.13	
Total Energy	9.07	8.48	8.33	8.19	7.15	6.92	6.71	6.16	5.83	5.61	
Price Indices											
GDP Chain-Type Price Index (2000=1.00)	1.127	1.276	1.253	1.231	1.620	1.495	1.370	2.059	1.815	1.576	
Consumer Price Index (1982-4=1)											
All-Urban	1.95	2.21	2.16	2.13	2.83	2.61	2.39	3.65	3.23	2.82	
Energy Commodities and Services	1.77	1.95	1.93	1.92	2.31	2.19	2.05	3.06	2.80	2.53	
Wholesale Price Index (1982=1.00)											
All Commodities	1.57	1.72	1.68	1.65	2.00	1.82	1.63	2.41	2.06	1.73	
Fuel and Power	1.57	1.65	1.64	1.64	1.94	1.84	1.72	2.62	2.39	2.17	
Interest Rates (percent, nominal)											
Federal Funds Rate	3.21	5.03	4.71	4.43	5.59	5.11	4.60	5.67	5.14	4.61	
10-Year Treasury Note	4.29	5.96	5.52	5.11	6.29	5.75	5.18	6.39	5.80	5.21	
AA Utility Bond Rate	5.44	7.65	7.36	7.09	8.30	7.72	7.13	8.40	7.77	7.14	
Value of Shipments (billion 2000 dollars)											
Total Industrial	5763	6001	6298	6587	6962	7779	8614	7712	9502	11357	
Non-manufacturing	1538	1469	1596	1723	1614	1846	2082	1698	2023	2353	
Manufacturing	4225	4532	4702	4865	5347	5933	6533	6014	7478	9004	
Energy-Intensive	1160	1229	1262	1295	1316	1426	1541	1396	1631	1874	
Non-Energy Intensive	3065	3304	3440	3569	4031	4507	4991	4618	5848	7130	
Population and Employment (millions)											
Population with Armed Forces Overseas	296.9	308.5	310.3	312.8	323.6	337.1	351.4	334.2	364.9	395.6	
Population (aged 16 and over)	231.8	242.5	244.2	246.6	256.2	265.4	274.7	268.6	288.6	308.7	
Population, over age 65	36.8	40.3	40.4	40.6	53.9	54.9	55.8	69.1	71.6	74.1	
Employment, Nonfarm	133.4	135.8	141.9	148.0	143.7	154.6	165.6	153.4	169.2	185.0	
Employment, Manufacturing	14.2	13.5	13.8	14.1	12.8	13.4	13.8	11.4	12.5	13.4	
Key Labor Indicators											
Labor Force (millions)	149.3	155.5	157.5	159.6	161.2	167.0	173.3	170.9	180.4	190.2	
Non-farm Labor Productivity (1992=1.00)	1.36	1.48	1.50	1.53	1.79	1.90	2.03	2.16	2.42	2.69	
Unemployment Rate (percent)	5.06	4.94	4.83	4.72	4.65	4.46	4.25	4.87	4.71	4.56	
Key Indicators for Energy Demand											
Real Disposable Personal Income	8105	9317	9568	9814	12184	13000	13834	15691	17535	19397	
Housing Starts (millions)	2.22	1.62	1.94	2.26	1.48	1.90	2.33	1.20	1.80	2.41	
Commercial Floorspace (billion square feet)	74.3	80.0	80.4	80.8	88.9	92.9	97.0	98.1	108.0	118.1	
Unit Sales of Light-Duty Vehicles (millions)	16.95	16.60	17.14	17.90	17.63	19.04	20.65	18.62	21.10	23.97	

GDP = Gross domestic product.

Btu = British thermal unit.

Sources: 2005: Global Insight macroeconomic model CTL0806, and Global Insight industry model, July 2005. **Projections:** Energy Information Administration, AEO2007 National Energy Modeling System runs LM2007.D112106A, AEO2007.D112106A, and HM2007.D112106A.